

## An Observational Assessment of Postnatal Mothers about Breastfeeding and Related Problems in Newborns: A KAP Study

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### Abstract

**Aim:** The aim of the present study was to assess knowledge, attitude, and practices of postnatal mothers toward breastfeeding.

**Methods:** A cross-sectional study was conducted for Department of Pediatrics, ESIC Medical College & Hospital, Bihta, Patna, Bihar for three months. All postnatal mothers who were attending immunization clinic and the paediatric outpatient department for the treatment of minor illnesses were included in study using non probability convenience sampling.

**Results:** The result depicts that majority (78%) of postnatal mothers belongs to 21–30 years age group. 75% patients were Hindus in the study and 25% were Muslims. Maximum (60%) were illiterate and majority (78%) delivered by normal vaginal delivery. Maximum (60%) were primigravida. The result depicts about knowledge of postnatal mothers about breastfeeding. Nearly 20% postnatal mothers reported that pre-lacteal feeds are not good for their babies and Majority (80%) said that colostrum's are essential for babies' health. Very low percentage (24%) of postnatal mothers started breastfeeding within 1 h of birth and only 26% knew that to give only breast milk for 1st 6 months. Table 3 depicts that, regarding attitude of breastfeeding, 86% mothers thinking of breastfeeding their child in night. 65% mothers had good attitude of breastfeeding healthier than formula-feeding. Only 32% of them were thinking of comfortable sitting position while breastfeeding.

**Conclusion:** Our results depict that there is a lack of knowledge, false attitude, and faulty practices regarding all attributes of breastfeeding among postnatal mothers in infant feeding. Regarding knowledge of breastfeeding, there is very less percentage of postnatal mothers having knowledge about early breastfeeding, exclusive breastfeeding, burping, breastfeeding on demand, and not to give prelacteal feeding.

**Keywords:** Breast Feeding; Knowledge; Attitude; Practice; Postnatal Mothers

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### Introduction

Breastfeeding has been branded as an effective tool to achieve the Global Strategy for Women's, Children's and Adolescents' Health (2016-2030), which was launched alongside the Sustainable

Development Goals as a roadmap for ending preventable deaths in a generation. [1] Since ancient times breast feeding is considered a basic human activity essential for infant survival. Circumstantial evidence is already established for

advantages gained by breast fed babies over non breast-fed babies with respect to nutrition, cognitive abilities, intelligence and overall health not only in initial years of life but also in adulthood where it decreases the likelihood of diabetes, obesity, hypertension, cancers and many other diseases. Exclusively breast feeding (EBF) for 6 months of life after birth is universal recommendation by the WHO. [2]

It means only breast milk should be given, no other liquids or solids including water are to be given. However, EBF allows the use of oral rehydration solution (ORS), drops or syrups of vitamins, minerals and medicines. After 6 months breast milk is not able to fulfil their needs, therefore, infants should start receiving nutritionally adequate and safe complementary foods while continuing with breastfeeding for up to 2 years or more. Breast feeding is a blessing both for mothers and babies, as a recent lancet breastfeeding series estimates that optimal breastfeeding could help prevent 20,000 maternal deaths from breast cancer every year. [3] Exclusive breastfeeding for the first 6 months is also a natural contraceptive that can aid in increasing birth spacing. [4]

Breastfeeding is beneficial to the child as it is natural with optimal nutrients and protective factors against infections. [5] As recommended by the WHO and American Academy of Pediatrics, exclusive breastfeeding for 6 months has many benefits to the growing infant such as calories, proteins, and bioactive factors such as IgA, lactoferrin, K-casein, cytokines, growth factors, glutathione and peroxides, which have anti-infective, antioxidant, and growth-promoting properties. [6] Human milk avoids hospitalizations and reducing infant mortality. Breast milk also improves intelligence quotient and brain size significantly compared to artificial feeds. [7,8] Globally, <40% of infants under the

age of 6 months are exclusively breastfed. [9]

In India about 2.4 million children die each year, of which two-thirds are associated with infant feeding practices which are inappropriate. [10] 13% reduction in infant mortality rate has been estimated with the promotion of exclusive breastfeeding. [11] According to the WHO recommendations, three factors are needed to reduce infant mortality rates, namely initiation of breastfeeding within 1 h of birth, practicing exclusive breastfeeding for 6 months, and proper supplementation at 6 months. However, misconceptions among mothers have made it difficult to execute the same at the community level. [12]

The knowledge attitude and practice of exclusive breastfeeding has been prejudiced by cultural, demographic, social, biophysical, and psychosocial factors. [12,13] In India, the rates of early initiation, exclusive breastfeeding are far from desirable and further KAP studies about breastfeeding are limited among Indian mothers. [11]

Thus, we conducted a study to assess knowledge, attitude, and practices of postnatal mothers toward breastfeeding.

### **Materials and Methods**

A cross-sectional study was conducted for Department of Pediatrics, ESIC Medical College & Hospital, Bihta, Patna, Bihar for three months.. All postnatal mothers who were attending immunization clinic and the paediatric outpatient department for the treatment of minor illnesses were included in study using non probability convenience sampling.

### **Inclusion criteria**

Mothers of healthy neonates and infants aged 1 month and above (up to 2 years) who were being breast fed and children born between 37 and 42 weeks of gestation.

### Exclusion criteria

Mothers of preterm babies, multiple gestations, those mothers who did not give their consent for the study and babies having congenital anomalies and congenital malformations were excluded.

The study was initiated after taking approval by the institutional ethics committee. The purpose of study was explained to mothers and verbal consent was obtained from those women who agreed to participate in the study. The total participants enrolled were 200. A face to face interview of study participants was done for collection of data in a separate room. A pre-designed and pre-tested structured questionnaire was used. It consisted of two parts; first part was having questions eliciting information about the demographic profile of

participants: Age, religion, type of family, working status of mothers, educational level, monthly income of family, place of delivery and sex of child. The second part contains questions assessing knowledge, attitudes and practices towards breastfeeding among postnatal mothers. The questions were asked in a local language and the time taken to complete the questionnaire was approximately between 15–20 minutes. After the completion of interview, all the mothers were informed about the significance of prolonged breast feeding up to period of 2 years and beyond. Confidentiality of participants was assured and maintained. Data was entered in Microsoft Excel and using descriptive statistics data was expressed in frequencies and percentages.

### Results

**Table 1: Demographic details**

Age in years	N%
<20	10 (5)
21–25	60 (30)
26–30	96 (48)
30–35	34 (17)
<b>Religion</b>	
Hindu	150 (75%)
Muslims	50 (25%)
<b>Education</b>	
Illiterate	120 (60%)
School education	70 (35%)
Graduation	10 (5%)
<b>Type of delivery</b>	
Normal	156 (78)
Cesarean	44 (22)
<b>Gravida</b>	
Primi	120 (60)
Multigravida	80 (40)

Table 1 depicts that majority (78%) of postnatal mothers belongs to 21–30 years age group. 75% patients were Hindu in the study and 25% were Muslims. Maximum (60%) were illiterate and majority (78%) delivered by normal vaginal delivery. Maximum (60%) were primigravida.

**Table 2: Mothers' knowledge regarding breastfeeding**

Characteristics	N%
Pre-lacteal feeds are not good	40 (20)
Colostrum is essential for babies health	160 (80)
Start breastfeeding within 1 h after delivery	48 (24)
Give only breast milk for first 6 months	52 (26)
Burping should be done after each feed	90 (45)
Breast feed on demand	24 (12)
Child needs vitamin syrup during first 6 months	20 (10)
Child <6 months require water during summer season	64 (32)
Breast feeding helps in mother and child bonding	180 (90)
Breast feeding can prevent diseases affecting breast	36 (18)
Breast feeding should be continued up to 2 years	170 (85)

The result depicts about knowledge of postnatal mothers about breastfeeding. Nearly 20% postnatal mothers reported that pre-lacteal feeds are not good for their babies and Majority (80%) said that colostrums are essential for babies' health. Very low percentage (24%) of postnatal mothers started breastfeeding within 1 h of birth and only 26% knew that to give only breast milk for 1st 6 months. <50% (45%) mothers knew about burping after each feed. Only 12% had knowledge about

breastfeeding on demand and only 10% mother knew vitamin to be needed in 1st 6 months. Almost 32% mothers had false knowledge of giving water in summer season in <6-month babies. Majority (90%) had knowledge about breastfeeding creating good mother-child bonding. 18% of mothers were aware of that breastfeeding prevents diseases affecting breast. Majority (85%) of mothers knew breastfeeding to be continued for 2 years.

**Table 3: Attitude of Mothers towards breastfeeding**

Characteristics	N%
I think I should breastfeed my child in the night	172 (86)
According to me breastfed babies are healthier than formula-fed babies	130 (65)
I think during breastfeeding the mother should sit comfortably	64 (32)
I think I should not feed if my child is sick	80 (40)
I think breastfeeding affect my beauty	24 (12)
I think it is better to stop breastfeeding when I start weaning	40 (20)
According to me, formula feeding is more convenient than breastfeeding	22 (11)

Table 3 depicts that, regarding attitude of breastfeeding, 86% mothers thinking of breastfeeding their child in night. 65% mothers had good attitude of breastfeeding healthier than formula-feeding. Only 32% of them were thinking of comfortable sitting position while breastfeeding. 40%

mothers had false thinking of not breastfeeding their children during illness. Only 12% were thinking of breastfeeding affecting beauty. Only 20% think to stop breastfeeding during weaning. Moreover, 11% felt formula-feeding more convenient than breastfeeding.

**Table 4: Distribution of mothers regarding breastfeeding practices**

Pre-lacteal feeds	N%
Given	50 (25)
Colostrum Given	168 (84)
<b>Practice of time of starting breastfeeding</b>	

Not remembering	6 (3)
<1 h	14 (7)
1 h–24 h	28 (56)
1 day–5 days	50 (25)
>5 days	16 (8)
<b>Used feeding bottles to feed the child</b>	
Yes	46 (23)
Not answered	4 (2)
<b>Frequency of breastfeeding</b>	
On demand	32 (16)
At regular intervals	161 (82)
<b>Supplementary feeding started</b>	
Before completing 6 months of age	10 (5)
After 7 months	80 (40)

Table 4 depicts that 25% mothers had given prelacteal feeds. Majority (84%) had given colostrum. very less about 7% of mothers had given breastfeeding within 1 h of birth. Maximum (56%) had given breastfeeding within 1 h–24 h of birth. 23.1% were still giving feeding bottles to feed their children. Majority (82%) were breastfeeding at regular intervals. Almost 40% started supplementary feeding after 7 months.

### Discussion

Breastfeeding is a basic human activity, vital to infant and maternal health and of immense economic value to households and societies. [15] The WHO recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development, and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more. [16] Exclusive Breast Feeding (EBF) is defined as infant feeding with human milk without the addition of any other liquids or solids. [17] The benefits of breast-feeding, to both mother and baby, have long been recognized. [18]

Regarding knowledge and practice of prelacteal feeds and colostrum's, in our study, 20% had knowledge of prelacteal feeds being not good. This percentage is

less as compared to other studies by Thomas et al. [19] where 30.2% mothers had awareness of prelacteal foods being not good. Further, in our study, 25% were practicing prelacteal feeds. Our percentage is high as compared to study by Chinnasami et al. [20] (10.5%) and Tiwari and Singh [21] but less as compared to study by Banapurmath et al. [22] (100%) in central Karnataka and Naseem and Mazher [23] (27%), Srivastava and Sethi [24] (38%), Hiregoudar et al. [25] (51%), and Singh et al. [26] (53%). Hence, in our study, there is a good amount of prelacteal feed practice and thus need to educate about prelacteal feeds.

Hence, in our study, there is a good amount of prelacteal feed practice and thus need to educate about prelacteal feeds. In our study, 80% mothers were aware of that colostrum is essential for health. This is low as compared in a study by Vijayalakshmi et al. [14] (99%), Thomas et al. [19] (91%), and Kumar et al.5 (94%) but contrary to study by Ben Slama et al.[22] (43% mothers had no knowledge about colostrum's). Regarding knowledge of other attributes of breastfeeding, only 21.3% were aware of starting breastfeeding within 1 h of birth which is low as compared to 80% in a study by Chinnasami et al. [20] and 39% in a study by Thomas et al. [19] Awareness of breastfeeding initiated within hour ranging

from 6.3% to 31% as per studies by Dongra et al., [27] Oche et al., [28] Oche and Umar, [29] and Choudhary et al. [30]

In our study, 11% knew about breastfeeding on demand which is low as compared to 13% and 39.4%, respectively, in studies by Thomas et al. [19] and Kumar et al. [5]. Hence, less knowledge about burping in our setup. In our study, 87.9% were aware of that breastfeeding increases mother-child bonding which is high as compared to 49% in a study by Kamath SP et al. [31] but low as compared to 96% in a study by Thomas et al. [19]. Regarding attitude of breastfeeding, in our study, maximum (86%) mothers thought of breastfeeding in night which is low compared to 91% in a study by Thomas et al. [19]. In our study, 65% thought of breastfed babies are healthier than formula-fed babies which is low as compared to Thomas et al. [19] (73.1%) and Vijayalakshmi et al. [14] (75%).

Regarding practice of breastfeeding, prelacteal feeds and colostrum's already discussed. Only 6.5% had given breastfeeding within 1 h. 56.5% had given within 1 h-24 h. This depicts less percentage of early breastfeeding within 1st h. This is comparable to study by Thomas et al. [19] but low percentage as compared to study by Naseem and Mazher, [23] Chinnasami, [20] and Kamath et al. [31,32]

### Conclusion

Our results depict that there is a lack of knowledge, false attitude, and faulty practices regarding all attributes of breastfeeding among postnatal mothers in infant feeding. Regarding knowledge of breastfeeding, there is very less percentage of postnatal mothers having knowledge about early breastfeeding, exclusive breastfeeding, burping, breastfeeding on demand, and not to give prelacteal feeding. There is a gap between attitude of breastfed babies healthier than formula-fed babies and practice of feeding bottles.

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